



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,145	03/24/2004	Michael Sonnleitner	RP-00369-US3	2765
28735	7590	10/03/2006	EXAMINER	
OSLER, HOSKIN & HARCOURT LLP (BRP) 2100 - 1000 DE LA GAUCHETIERE ST. WEST MONTREAL, H3B4W5 CANADA			PRICE, CRAIG JAMES	
			ART UNIT	PAPER NUMBER
			3753	

DATE MAILED: 10/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/807,145	SONNLEITNER ET AL.	
	Examiner	Art Unit	
	Craig Price	3753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 and 26-30 is/are pending in the application.
- 4a) Of the above claim(s) 2,3,6-10,14 and 15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4,5,11-13 and 26-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>5/31/05</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Claims 2,3,6-10,14 and 15 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 12/12/2005.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Drawings

2. The drawings were received on 19 July 2006. These drawings are acceptable.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

Art Unit: 3753

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 1,4,5 and 11-13 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. There is no clear support for the negative limitation of the newly amended claim reciting, "and wherein the piston slides from its roll-over position to its normal position independently of a fluid in the inner chamber when the valve rolls into an upright position".

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1,4,5,11-13 and 30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claimed limitation "wherein the piston slides from its rollover position to its normal position independently of a fluid pressure" is unclear because there is some dependence on the fluid pressure.

Regarding claim 30, the claimed limitation "a tight clearance", is unclear as to how tight the clearance may be, is the clearance tight enough to maintain a proper l/d ratio to prevent the unit from sticking due to tilting or is the clearance tight to minimize leakage? Furthermore, the claimed limitation "the sealing surface comprises a tight

Art Unit: 3753

clearance", is unclear as to how a surface can have a space or clearance (the surface may comprise a surface roughness or some form on the surface or the gap between may comprise a clearance having some value) Please clarify.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1,4, and 11-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Orenstein et al. (WO 00/53960).

Regarding claim 1, Orenstein et al. disclose the roll-over valve comprising, a valve housing (12) having an inner chamber that defines an axis, an inlet opening (20 on the side of housing 12) disposed in a lateral side of the valve housing, and an outlet opening (22) disposed in the valve housing, and a piston (34,42,74) slidably disposed in the inner chamber for movement relative to the valve housing along the axis, the piston having normal and roll-over positions relative to the valve housing, wherein the inlet and outlet openings fluidly connect to each other via the inner chamber when the piston is in the normal position, wherein the piston slides from its normal position to its roll-over position under the force of gravity when the valve rolls into an overturned position, and wherein the piston blocks (resilient seal 50) at least one of the inlet and

Art Unit: 3753

outlet openings to prevent fluid flow through the inner chamber when the piston is in its roll-over position (Col. 6, Lns. 17-20) and as seen in Figure 2, and wherein the piston slides from its roll-over position to its normal position independently of a fluid in the inner chamber when the valve rolls into an upright position (Orenstein et al. meets this newly amended limitation in as much in the same manner as does applicant's, also see page 10, Lns. 4-6).

Regarding claim 4, Orenstein et al. disclose that an air-bleed passage (20 directly underneath valve assembly 30) that fluidly connects portions of the inner chamber that are disposed on opposing axial sides of the piston as seen in Figure 2.

Regarding claim 11, Orenstein et al. disclose that the inlet opening (20 on the side wall of 12) connects to the inner chamber at a position where any pressure that develops in the inlet opening does not urge the piston into the roll-over position.

Regarding claim 12, Orenstein et al. disclose that the outlet opening is disposed at an upper axial end of the inner chamber as shown in figure 2.

Regarding claim 13, Orenstein et al. disclose an upper portion of the piston has a frusto-conical surface (34) as seen in Figure 2.

6. Claims 1,4,5,11,12 and 26-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Matsudaira et al. (3,288,992).

Regarding claims 1 and 26, Matsudaira et al. disclose the roll-over valve comprising, a valve housing (G, H) having an inner chamber that defines an axis, an

Art Unit: 3753

inlet opening (62) disposed in a lateral side of the valve housing, and an outlet opening (60) disposed in the valve housing, and a piston (66) slidably disposed in the inner chamber for movement relative to the valve housing along the axis, the piston having normal and roll-over positions relative to the valve housing, wherein the inlet and outlet openings fluidly connect to each other via the inner chamber when the piston is in the normal position, wherein the piston slides from its normal position to its roll-over position under the force of gravity when the valve rolls into an overturned position, and wherein the piston blocks at least one of the inlet and outlet openings to prevent fluid flow through the inner chamber when the piston is in its roll-over position (Col. 6, Lns. 48-53, as the glass breaks the outlet is blocked in as much the same manner as is applicant's) and as seen in Figure.

Regarding claims 4 and 27, Matsudaira et al. disclose that an air-bleed passage (63,65) that fluidly connects portions of the inner chamber that are disposed on opposing axial sides of the piston as seen in Figure 5.

Regarding claim 5, Matsudaira et al. disclose that the air-bleed passage has first and second opposing ends, wherein the first end of the air bleed passage fluidly connects to a bottom axial portion of the inner chamber such that the first end aligns with the axis, and wherein the second end fluidly connects to the outlet opening as shown in figure 5.

Regarding claims 11 and 28, Matsudaira et al. disclose that the inlet opening (62, in the same manner as applicant's) connects to the inner chamber at a position where

any pressure that develops in the inlet opening does not urge the piston into the roll-over position.

Regarding claims 12 and 29, Matsudaira et al. disclose that the outlet opening is disposed at an upper axial end of the inner chamber as shown in figure 5.

Regarding claim 30, Matsudaira et al. disclose that the sealing surface comprises a tight clearance (in as much as applicant's) between the piston and the valve housing.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Orenstein et al. (WO00/53960) in view of Cryder et al. (3,529,624).

Orenstein et al. teaches all of the claimed invention except that the air-bleed passage has first and second opposing ends, wherein the first end of the air-bleed passage fluidly connects to a bottom axial portion of the inner chamber such that the first end aligns with the axis, and wherein the second end fluidly connects to the outlet opening. Cryder et al. teaches the use of a passage/conduit (68) used in a valve.

It would have been obvious to one of ordinary skill in the art at the time of invention to utilize the conduit of Cryder et al. with the valve of Orenstein et al. to have an air-bleed passage has first and second opposing ends, wherein the first end of the air-bleed passage fluidly connects to a bottom axial portion of the inner chamber such that the first end aligns with the axis, and wherein the second end fluidly connects to the outlet opening, in order to dampen the movement of the piston/valve and prolong the life of the valve (Col. 2, Lns. 12-13 and Col. 3, Lns. 36-47).

Response to Arguments

9. Applicant's arguments filed 19 July 2006 have been fully considered but they are not persuasive.

In regards to your argument concerning that the Orenstein et al. reference does not teach a piston sliding from its rollover position to its normal position independently of a fluid pressure, page 10, lines 4-6 disclose that gravity shuts the valve in the event of a rollover, therefor the valve of Orenstein operates in as much as the applicant's valve is claimed to operate.

In regards to your argument concerning the use of the Cryder reference, Cryder's valve is a reciprocating valve similar to Orenstein et al's valve, where the Cryder reference is being used to incorporate a fluid path for dampening the rate of fall of the valve.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

Art Unit: 3753

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Craig Price whose telephone number is (571) 272-2712. The examiner can normally be reached on 7AM - 5:30PM M-R.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eric Keasel can be reached on (571) 272-4929. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CP



28 September 2006



ERIC KEASEL
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700